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Elastic scrip bag

The present invention relates to the field of bags for carrying, on foot, loads of modest weight, such as ordinary household purchases (foodstuffs, cleaning products, etc.).

There is currently a need for a large-capacity bag that leaves the carrier's hands free and that, in the empty state, is light in weight and occupies a minimum volume such that it may be placed, for example, in a garment pocket or a handbag. A backpack offers the first two characteristics, but not the latter two.

In the past, net shopping bags have been proposed, in which the meshes were produced from bundles of foam-type elastic threads. These nets were very light in weight and offered a large capacity as compared to their overall size in the empty state, but they did not leave the carrier's hands free and, furthermore, the opening-out of their meshes in the laden state meant that small objects that might fall out could not be placed in them. In addition, there was rapid deterioration of the elastic threads on which non-smooth articles, such as bread, became caught.

In an even more distant past, use was made of scrip bags for carrying, on foot, moderate loads. "Scrip bag" is understood to mean a bag that is slit in its middle and closed at its ends, thereby forming two pockets when it is carried slung over the shoulder.

Although, for several centuries, scrip bags were one of the most commonly used types of bag, they fell into disuse with the advent of *inter alia* backpacks. Therefore, they have not been the subject of modifications or developments.

Scrip bags had to reconcile two contradictory criteria.

On the one hand, they had to be made from a material that was sufficiently thick and rigid to be wear-resistant

and to be able to withstand the strain exerted by the loads that might be placed in them.

On the other hand, they had to be made from a material that was sufficiently thin and flexible to enable
5 them, in the laden state, to be folded comfortably around the carrier's shoulder.

Leather was the best-suited material for a compromise between these conflicting properties, but it is an expensive product, heavy even in the empty state.

10 Furthermore, in their known form, scrip bags had the drawback that the opening providing access to the two pouches generally covered the entire width of the scrip bag, with the risk of the articles being carried accidentally being ejected from the scrip bag when the
15 latter was thrown over the shoulder or if it fell to the ground.

As indicated above, the objective of the present invention is to provide a large-capacity bag that leaves the carrier's hands free and, in the empty state, is light
20 in weight and occupies a minimum volume, and this is achieved by proposing a novel scrip-type bag, consisting of at least two layers of material, of the same shape and same dimensions, that are superposed and secured to one another along their periphery so as together to define two pockets
25 that can be accessed via a central opening, said bag having a longitudinal direction and a transverse direction, and being characterized in that said opening is made in the longitudinal direction of the bag and in that said material forming at least one of the layers consists of a fabric
30 that can stretch in the machine direction and/or in the cross direction.

Thus, according to one of the basic characteristics of the bag according to the invention, the central opening is made not transversely, as in the prior art, but
35 longitudinally.

These two layers that make up the bag may be two pieces of different material sewn together along their

edges, a single piece of material folded in two on itself and sewn together or, alternately, a single piece of tubular material.

According to a preferred embodiment, the opening is
5 made in the periphery of the bag.

If said bag is not made from a tubular material, said opening may be located along one of the lines of stitching holding together the layers of material making up the bag. In this way, the opening does not consist of an incision
10 made in the fabric, but of an interruption in one of the lines of stitching. The integrity and, consequently, the strength of the fabric is not diminished.

By "line of stitching", in this context, any type of fastening-together of the two layers, such as sewing,
15 adhesive bonding, melting, etc., must be understood.

If the bag is made from a tubular material, i.e. a material that does not comprise a line of stitching in the longitudinal direction but only at the two ends, in the transverse direction, said opening is made directly by
20 cutting along a generatrix of the tube.

The second basic characteristic of the bag according to the invention is that it consists of a fabric that can stretch in the machine direction and/or in the cross direction.

25 "Fabric" is understood to mean, in this case, either a material obtained by a weaving process, a material obtained by knitting, or even a nonwoven material or a film.

As used in this case, the term "machine direction"
30 refers, in the case of woven materials, to the warp direction, in the case of knitted materials, to the direction of the columns of stitches, and in the case of nonwoven materials and films to the direction of displacement of the sheet as it is formed in the production
35 installation.

As used in this context, the expression "cross direction" refers to the direction that is perpendicular to the machine direction defined above.

The use of a stretch fabric enables the bag to have
5 variable volume, depending on whether it is empty or full.

Although it is well understood that this variation in dimensions of an article that can stretch through the effect of a force exerted on it is not in itself novel, this property points to unanticipated effects within the
10 context of the invention: combined with the particular shape of the bag and the particular position of the opening, it enables the laden bag thrown over the shoulder to be given a thin, gathered-up form at the shoulder and an expanded shape on either side of the shoulder owing to the
15 volume of articles slipped into either pocket, the opening giving access to said pockets being closed up on account of the pulling force exerted by the weight of said articles.

In the empty state, the bag is light in weight, thin and flat, and it may be folded and slipped into a pocket or
20 into a handbag or even worn as a scarf, belt or hat.

In order to give the bag its optimum properties of light weight and low bulk, the stretch fabric advantageously has a weight per m^2 of between approximately 60 and 400 g/m^2 , preferably 200 g/m^2 .

25 Satisfactory fabrics may consist of Lycra or, alternately, fabrics composed of elastane, polyester and/or triacetate.

In practice, it may be envisaged that, through the effect of a load, the bag deforms preferentially in one
30 direction over the other. To this end, a fabric is chosen in which the extension is different in the machine direction and in the cross direction, and in the bag the direction of greater extension is used transversely. Thus, loading of the bag is not excessively extended, which could
35 interfere with walking, but, rather, gives it a volume toward the front and toward the rear.

Another measure for controlling the shape assumed by the bag in the laden state consists in using a material with relatively greater stretch to form one of the walls of the bag and a material of lower stretch or even a non-
5 stretch material to form the opposite wall, the intention being for this latter wall to come into contact with the carrier when the bag is thrown over the carrier's shoulder.

Yet another possible measure for controlling the shape assumed by the bag when it opens out, and in order to
10 reinforce its stitching, consists in providing at least one inelastic strip of material along the periphery of the layers of material making up the bag, except, at least, in the transverse zone of the bag containing the opening giving access to the bag pockets. According to a particular
15 embodiment, said transverse zone of the bag containing the opening giving access to the bag pockets may also be reinforced, but by means of a strip of elastic material of which the elasticity may be substantially identical to or slightly lower than that of the fabric in order to stiffen
20 and close up the opening.

However, in a preferred embodiment of the invention, this transverse zone has no reinforcement strip - firstly so as not to alter the opening-out capacity of the opening giving access to the pockets in order for them to be loaded
25 and, secondly, in order to give said transverse zone full latitude to strength under load, which narrows it at the point where it comes into contact with shoulder, this having the effect of improving the bag's stability and of tightly closing the opening giving access to the pockets.

30 In a preferred embodiment, the bag according to the invention has a rectangular shape and, when empty, it has a length of between approximately 70 and approximately 100 cm and a width of between approximately 40 and approximately 60 cm.

35 The dimensions will be chosen, on the one hand, as a function of the average size of the user envisaged - adult

or child - and, on the other hand, as a function of the stretchability of the material chosen.

As for the opening, this will have a length of between approximately 10 and approximately 20 cm, the length chosen depending on the size of the bag and the stretchability of the material.

As may be appreciated from the above, the length of the opening is relatively small (preferably much smaller than the width of the bag and quite different from the case of scrip bags of the prior art), but the stretchability of the material enables relatively large articles to be placed in the bag purely on the basis of deformation of the opening. The small size of the opening and its position limit the risks of articles being "expelled" out of the bag through said opening when the bag is being carried or, alternately, is put down on the ground, the articles being "trapped" in the bag. Expulsion of this kind is, furthermore quite impossible when the laden bag is carried over the shoulder, the lips of the opening being firmly pressed against one another through the effect of the weight.

The bag according to the invention may take on various forms and consist of one or more pieces of fabric secured together so as to form a closed space.

However, in a particularly economical embodiment, the bag consists of a single piece of fabric folded over on itself so as to form two superposed thicknesses of fabric, said two thicknesses being sewn right along their free edges, an opening nevertheless being provided in the middle of the side opposite the side forming the fold line.

Given the small size of the opening giving access to the pockets and also given its position, it may be difficult to locate it rapidly when it is desired to load the bag. Thus, in a preferred embodiment of the invention, a visual or tactile reference means may advantageously be associated with said opening.

Such a reference means may consist, for example, of a braid, a stripe or an edging in a contrasting color or in a material with a different feel, etc., it being understood that, irrespective of the means chosen, it should not alter
5 the stretchability of the opening.

The invention will be better understood and its advantages will become more clearly apparent in light of the following detailed description given with reference to the appended drawings, in which:

10 Figure 1 shows one embodiment of the bag according to the invention, flat and empty;

Figure 2 shows a partial section on a larger scale along line II-II of Figure 1;

15 Figure 3 illustrates the bag of Figure 1 in the laden state being carried;

Figure 4 illustrates a variant embodiment of a bag according to the invention, flat and empty; and

Figure 5 illustrates another variant embodiment of a bag according to the invention, flat and empty.

20 With reference to Figure 1, it may be seen that the bag 1 according to the invention consists of a rectangular piece of stretch fabric folded over on itself along its central longitudinal line, thereby forming two superposed thicknesses E_1 and E_2 of fabric, of lengths 2 and 3 and of
25 widths 4 and 5. The two thicknesses E_1 and E_2 are secured together, by stitching along 6, along said widths 4 and 5 and said length 3, a non-sewn zone forming an opening 7 nevertheless being formed.

Figure 2 shows how the free edges of the thicknesses
30 E_1 and E_2 of material are turned to the inside and covered with a strip 8 of inelastic material, the whole being joined by two lines of stitches 6a, 6b. This strip 8 of material reinforces the bag at the stitching 6, reduces the stretchability of the material making up the bag at this
35 same point and gives the inside of the bag a good finish. For the reasons set forth above, it is preferable for there to be no strip of non-stretch material in the transverse

zone Z containing the opening 7, this being the zone on either side of which the bag forms two pockets P_1 and P_2 .

Elastic braid 9 in a contrasting color to that of the bag edges the opening 7 to make the latter easier to
5 locate.

The dimensions of the piece of stretch fabric used to make up the bag may vary as a function of the capacity and use desired. According to the embodiment shown, the finished bag has the shape of a rectangle, which, when
10 empty, is approximately 80 cm in length by approximately 45 cm in width, with an opening 7 of approximately 18 cm in length, these dimensions constituting only a non-limiting example.

In order to load the bag according to the invention,
15 articles to be carried are introduced via the opening 7 and are distributed evenly in the pockets P_1 and P_2 so that the bag is balanced. The opening-out capacity of the opening 7 allows relatively large objects to be placed inside. Once the bag has been loaded, it is grasped in the zone Z, the
20 weight per m^2 of the fabric making it possible to hold the entire thickness of the bag in the ring formed between the thumb and the index finger, and the bag is placed over the shoulder, straddling the latter, with the zone Z thus gathered up forming a "hinge point" between the pockets P_1
25 and P_2 of the bag (see Figure 3).

Figure 4 illustrates a variant embodiment in which the bag 1' consists of a rectangular piece of fabric folded over on itself, not in the form of parallel layers of the same width, as in Figure 1, but in the form of three
30 parallel layers, the outer two layers having a width equal to half of the central layer and being folded over on the central layer. The longitudinal stitching 4' of the bag in which the opening 7' is made, is on the median line of one of the walls of the bag and not on an edge of the bag. It
35 will obviously be understood that, in practice, the piece of fabric is folded in two as in Figure 1, the stitching 4' is created while making the opening 7', the tubular piece

thus obtained is arranged such that the stitching 6' is placed on the longitudinal center line of one of the layers and the ends that still remain free are sewn by the stitching 5' and 6'.

5 Figure 5 illustrates another embodiment of the invention in which the bag 1'' consists of a single piece of tubular fabric sewn at both its free ends 5'' and 6'', in the direction of the width of the bag, the fabric being slit in the direction of the length in order to create the
10 opening 7''.

It is understood that the invention is not limited to the embodiments described and shown. In particular, instead of having a rectangular shape, the bag may have another, elongate form that is symmetrical about its transverse
15 median axis, for example it may be of hourglass form. Furthermore, instead of being made from a single piece, it may consist of several pieces of fabric, possibly of differing stretchability, that are sewn or otherwise secured together.